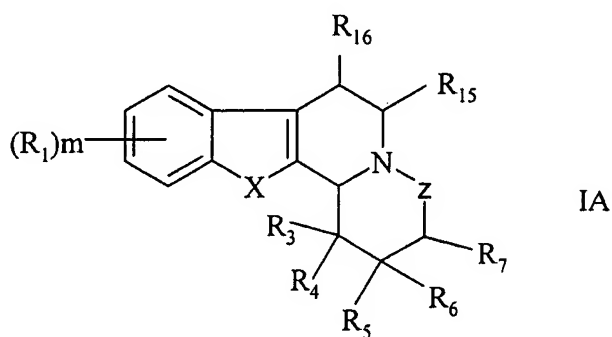


**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-39. (Canceled).

40. (Currently Amended) A compound of formula IA:



wherein,

X is O or S;

Z is -CHR<sub>8</sub>-;

R<sub>1</sub> is chosen from hydroxy, (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, halogen, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy-CO-, CN, NO<sub>2</sub>, NH<sub>2</sub>, mono- or di(C<sub>1</sub>-C<sub>6</sub>)alkylamino, and carboxyl;

R<sub>3</sub> is chosen from hydroxy, (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>2</sub>-C<sub>6</sub>)alkenyl, hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkyl(C<sub>1</sub>-C<sub>6</sub>)alkyl, aryl, aryl(C<sub>1</sub>-C<sub>6</sub>)alkyl, aryloxy, aryl(C<sub>1</sub>-C<sub>6</sub>)alkoxy, aryloxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, aryl(C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl, NH<sub>2</sub>, amino(C<sub>1</sub>-C<sub>6</sub>)alkyl, mono- or di(C<sub>1</sub>-C<sub>6</sub>)alkylamino, mono- or di(C<sub>1</sub>-C<sub>6</sub>)alkylamino(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkyl-CO-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-CO-O-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-CO-O-(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-

C<sub>6</sub>)alkoxy-CO-, (C<sub>1</sub>-C<sub>6</sub>)alkoxy-CO-(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy-CO-(C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, carbamoyl, mono- or di(C<sub>1</sub>-C<sub>6</sub>)alkylcarbamoyl, carboxyl and (C<sub>1</sub>-C<sub>6</sub>)alkyl-S-(C<sub>1</sub>-C<sub>6</sub>)alkyl,

wherein the (C<sub>3</sub>-C<sub>7</sub>)cycloalkyl or aryl group is unsubstituted or is substituted with 1 or 2 substituents each independently chosen from hydroxy, (C<sub>1</sub>-C<sub>6</sub>)alkyl, halogen, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, NH<sub>2</sub>, CN and NO<sub>2</sub>, or one of R<sub>3</sub> or R<sub>4</sub> and R<sub>6</sub> together form a bond between the ring atoms to which they are attached;

R<sub>4</sub> is chosen from hydroxy, (C<sub>1</sub>-C<sub>6</sub>)alkyl, hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy and (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl;

R<sub>5</sub> is chosen from H, hydroxy, (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>2</sub>-C<sub>6</sub>)alkenyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, (C<sub>3</sub>-C<sub>7</sub>)cycloalkyl(C<sub>1</sub>-C<sub>6</sub>)alkyl, aryl, aryl(C<sub>1</sub>-C<sub>6</sub>)alkyl, aryloxy, aryl(C<sub>1</sub>-C<sub>6</sub>)alkoxy, aryloxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, aryl(C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkyl-CO-O-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-CO-O-(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy-CO-(C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, carbamoyl, mono- or di(C<sub>1</sub>-C<sub>6</sub>)alkylcarbamoyl, carboxyl and (C<sub>1</sub>-C<sub>6</sub>)alkyl-S-(C<sub>1</sub>-C<sub>6</sub>)alkyl,

wherein the (C<sub>3</sub>-C<sub>7</sub>)cycloalkyl or aryl is unsubstituted or is substituted with 1 or 2 substituents each independently chosen from hydroxy, (C<sub>1</sub>-C<sub>6</sub>)alkyl, halogen, (C<sub>1</sub>-C<sub>6</sub>)alkoxy, NH<sub>2</sub>, CN and NO<sub>2</sub>, or R<sub>4</sub> and R<sub>5</sub> form, together with the carbon ring atoms to which they are attached, a condensed five to seven membered saturated carbocyclic ring substituted with 1, 2, or 3 substituents, R<sub>9</sub>,

wherein R<sub>9</sub> are each independently chosen from hydroxy, (C<sub>1</sub>-C<sub>6</sub>)alkyl, halogen, NH<sub>2</sub>, NO<sub>2</sub>, (C<sub>3</sub>-C<sub>7</sub>)cycloalkyl, hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl, amino(C<sub>1</sub>-C<sub>6</sub>)alkyl, mono- or di(C<sub>1</sub>-C<sub>6</sub>)alkylamino, mono- or di(C<sub>1</sub>-C<sub>6</sub>)alkylamino(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy,

(C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, carboxyl, (C<sub>1</sub>-C<sub>6</sub>)alkyl-CO-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-CO-O-, (C<sub>1</sub>-C<sub>6</sub>)alkoxy-CO-, (C<sub>1</sub>-C<sub>6</sub>)alkoxy-CO-(C<sub>1</sub>-C<sub>6</sub>)alkyl, carbamoyl mono- or di(C<sub>1</sub>-C<sub>6</sub>)alkylcarbamoyl and oxo;

R<sub>6</sub> is chosen from H, hydroxy, (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy and (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, or R<sub>6</sub> forms a bond between the ring atom to which it is attached and the ring atom to which R<sub>7</sub> is attached;

R<sub>7</sub> is chosen from H, hydroxy, (C<sub>1</sub>-C<sub>6</sub>)alkyl, hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy and (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl;

R<sub>8</sub> is H, hydroxy, (C<sub>1</sub>-C<sub>6</sub>)alkyl, hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy or (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl;

R<sub>15</sub> is chosen from H, (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>2</sub>-C<sub>6</sub>)alkenyl, hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, halo(C<sub>1</sub>-C<sub>6</sub>)alkyl, amino(C<sub>1</sub>-C<sub>6</sub>)alkyl, mono- or di(C<sub>1</sub>-C<sub>6</sub>)alkylamino(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkyl-CO-, (C<sub>1</sub>-C<sub>6</sub>)alkyl-CO-O-(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy-CO-, (C<sub>1</sub>-C<sub>6</sub>)alkoxy-CO-(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy-CO-(C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, carbamoyl, mono- or di(C<sub>1</sub>-C<sub>6</sub>)alkylcarbamoyl and carboxyl;

R<sub>16</sub> is chosen from H and (C<sub>1</sub>-C<sub>6</sub>)alkyl;

~~R<sub>7</sub> and R<sub>8</sub> are attached to the carbon ring atoms, which are adjacent; and~~

m is 0 to 2;

or a pharmaceutically acceptable salt or ester thereof.

41. (Previously presented) The compound according to claim 40, wherein X is O.
42. (Previously presented) The compound according to claim 40, wherein X is S.

43. (Previously presented) The compound according to claim 40, wherein R<sub>3</sub> is chosen from hydroxy, (C<sub>1</sub>-C<sub>6</sub>)alkyl, hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)alkoxy-CO- and (C<sub>1</sub>-C<sub>6</sub>)alkyl-CO-O-(C<sub>1</sub>-C<sub>6</sub>)alkyl, and R<sub>4</sub> chosen from is (C<sub>1</sub>-C<sub>6</sub>)alkyl and hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkyl.

44. (Previously presented) The compound according to claim 40, wherein R<sub>3</sub> is chosen from hydroxy, hydroxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, and (C<sub>1</sub>-C<sub>6</sub>)alkoxy(C<sub>1</sub>-C<sub>6</sub>)alkyl, and R<sub>4</sub> is (C<sub>1</sub>-C<sub>6</sub>)alkyl.

45. (Previously presented) The compound according to claim 40, wherein R<sub>4</sub> and R<sub>5</sub> form, together with the carbon ring atoms to which they are attached, a condensed six membered saturated carbocyclic ring.

46. (Previously presented) The compound according to claim 40, wherein the compound is 1 $\alpha$ -Methyl-1,3,4,5,6,11b-hexahydro-2H-11-oxa-4a-aza-benzo[a]fluoren-1-ol, (1 $\alpha$ -Methyl-1,3,4,5,6,11b $\beta$ -hexahydro-2H-11-oxa-4a-aza-benzo[a]fluoren-1-yl)-methanol, (-)-(1 $\alpha$ -Methyl-1,3,4,5,6,11b $\beta$ -hexahydro-2H-11-oxa-4a-aza-benzo[a]fluoren-1-yl)-methanol, (+)-(1 $\alpha$ -Methyl-1,3,4,5,6,11b $\beta$ -hexahydro-2H-11-oxa-4a-aza-benzo[a]fluoren-1-yl)-methanol, 1 $\alpha$ -Isopropyl-1,3,4,5,6,11b-Hexahydro-2H-11-oxa-4a-aza-benzo[a]fluoren-1-ol, 1 $\alpha$ -Ethyl-1,3,4,5,6,11b $\beta$ -hexahydro-2H-11-oxa-4a-aza-benzo[a]fluoren-1-ol, (1 $\alpha$ -Ethyl-1,3,4,5,6,11b $\beta$ -hexahydro-2H-11-oxa-4a-aza-benzo[a]fluoren-1-yl)-methanol, (1-Hydroxymethyl-1,3,4,5,6,11b-hexahydro-2H-11-oxa-4a-aza-benzo[a]fluoren-1-yl)-methanol, 1-Methoxymethyl-1 $\alpha$ -methyl-1,3,4,5,6,11b $\beta$ -hexahydro-2H-11-oxa-4a-aza-benzo[a]fluorene, (-)-1-Methoxymethyl-1 $\alpha$ -methyl-1,3,4,5,6,11b $\beta$ -hexahydro-2H-11-oxa-4a-aza-benzo[a]fluorene, (+)-1-Methoxymethyl-1 $\alpha$ -methyl-1,3,4,5,6,11b $\beta$ -hexahydro-2H-11-oxa-4a-aza-benzo[a]fluorene, 1 $\alpha$ -Methyl-

1,3,4,5,6,11b- $\alpha$ -hexahydro-2H-11-oxa-4a-aza-benzo[a]fluorene-1-carboxylic acid ethyl ester, 1-Ethoxymethyl-1 $\alpha$ -methyl-1,3,4,5,6,11b $\beta$ -hexahydro-2H-11-oxa-4a-aza-benzo[a]fluorene, (1 $\alpha$ -Methyl-1,3,4,5,6,11b $\alpha$ -hexahydro-2H-11-oxa-4a-aza-benzo[a]fluoren-1-yl)-methanol, (-)-(1 $\alpha$ -Methyl-1,3,4,5,6,11b $\alpha$ -hexahydro-2H-11-oxa-4a-aza-benzo[a]fluoren-1-yl)-methanol, (+)-(1 $\alpha$ -Methyl-1,3,4,5,6,11b $\alpha$ -hexahydro-2H-11-oxa-4a-aza-benzo[a]fluoren-1-yl)-methanol, 1 $\alpha$ -Ethyl-1,3,4,5,6,11b $\alpha$ -hexahydro-2H-11-oxa-4a-aza-benzo[a]fluorene-1-carboxylic methyl ester, 1-Methoxymethyl-1 $\alpha$ -methyl-1,3,4,5,6,11b $\alpha$ -hexahydro-2H-11-oxa-4a-aza-benzo[a]fluorene, (-)-1-Methoxymethyl-1 $\alpha$ -methyl-1,3,4,5,6,11b $\alpha$ -hexahydro-2H-11-oxa-4a-aza-benzo[a]fluorene, (+)-1-Methoxymethyl-1 $\alpha$ -methyl-1,3,4,5,6,11b $\alpha$ -hexahydro-2H-11-oxa-4a-aza-benzo[a]fluorene, (1 $\alpha$ -Ethyl-1,3,4,5,6,11b $\alpha$ -hexahydro-2H-11-oxa-4a-aza-benzo[a]fluorene-1-yl)-methanol or acetic acid 1 $\alpha$ -Methyl-1,3,4,5,6,11b $\beta$ -hexahydro-2H-11-oxa-4a-aza-benzo[a]fluoren-1-ylmethyl ester.

47. (Previously presented) The pharmaceutical composition comprising at least one compound according to claim 1 and a pharmaceutically acceptable diluent, carrier and/or excipient.

48. (Canceled).

49. (Canceled).